



Miami-Dade Transportation Plan (to the Year 2030)

Data Compilation, Review, And Development

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1.0 INTRODUCTION

The Miami-Dade County Long Range Transportation Plan Update to the Year 2030 is the latest effort in the continuing, comprehensive and cooperative transportation planning process for Miami-Dade County. This technical report documents the review of the data used in the model validation effort for the 2030 Plan. This report includes sections on the study area, the study area networks, base year 2000 ZDATA, and the interim and year 2030 ZDATA.

2.0 STUDY AREA

The study area for the 2030 Plan is Miami-Dade County including all of its thirty-one municipalities: Aventura, Bal Harbour, Bay Harbor Islands, Biscayne Park, Coral Gables, El Portal, Florida City, Golden Beach, Hialeah, Hialeah Gardens, Homestead, Indian Creek, Islandia, Key Biscayne, Medley, Miami, Miami Beach, Miami Lakes, Miami Springs, Miami Shores, North Bay Village, North Miami, North Miami Beach, Opa-locka, Pinecrest, South Miami, Sunny Isles, Surfside, Sweetwater, Virginia Gardens, and West Miami. Miami-Dade County encompasses over 2,000 square miles and is bounded by Broward County on the north, Monroe County on the south, Collier and Monroe Counties on the west, and the Atlantic Ocean on the east. The City of Miami is the county seat and largest center of business and government for Miami-Dade County. To analyze the study area, it was broken up into three different boundary types: Traffic Analysis Zones (TAZ), Commission Districts, and Analysis Areas. These boundaries are shown in **Figure 1**.

2.1 TAZ Boundaries

The TAZ structure is a very important component to the development of a transportation planning model. By providing the framework for associating land use data with geographic location reflecting access to area roadways, each TAZ should include a relatively homogeneous population and land use type. Natural features or major transportation facilities usually serve as boundaries to TAZs. TAZs may be split when, over time, the land use characteristics change or the demographics within the TAZ change.

The TAZ structure used for the 2030 Plan model was updated from the 2025 Plan model TAZ structure by a technical subcommittee. Refinements made to the TAZ structure better reflect current and future land use. The 2030 Plan model has 1,466 TAZs.

2.2 Commission Districts

Miami-Dade County is divided into 13 Commission Districts. These political subdivisions were created to allow for all county citizens to be adequately represented in the operation of county government. Each commissioner serves a four-year term and is chosen by voters from the individual's district of residence in a non-partisan election. The Board of County Commissioners (BCC) has extensive responsibilities, including reviewing and adopting comprehensive development plans for the county; licensing and regulating taxis, jitneys, limousines and rental cars; setting tolls and providing public

transportation systems; regulating utilities; adopting and enforce building codes; establishing zoning controls; and providing public health facilities, cultural facilities, and housing programs. For the purposes of this study, the commission district boundaries have been aligned to the TAZ boundaries.

2.3 Transportation Planning Areas

For the purposes of this study, Miami-Dade County was divided into six Transportation Planning Areas. These areas are based on the current boundaries of the County Commissioner districts and are aligned to match existing TAZ borders. The planning areas are used to analyze the study area in larger subsections than TAZs. The socioeconomic data presented in this report will be by planning area.

- **North Area** - The North Transportation Planning Area includes the portion of Miami-Dade County south of the Broward / Miami-Dade County Line, east of NW 52nd Avenue and NW 37th Avenue (connected by Gratigny Parkway), north of NW North River Drive / MacArthur Causeway, and west of Biscayne Bay.

North Area includes:

- Commission Districts One, Two, and Three.

*North Area **Municipalities** include:*

- Cities of Miami Gardens, Opa-Locka, Miami-Dade, North Miami, Miami Shores, and Town of El Portal.

*North Area **Major Neighborhoods** include:*

- The Lake District and
- Airport West commercial and industrial area.

- **Northwest Area** - The Northwest Transportation Planning Area includes the northwestern part of Miami-Dade County west of NW 52nd Avenue and north of SW 8th Street / Tamiami Trail and Dolphin Expressway / SR-836.

*Northwest area **Commission Districts**:*

- Commission Districts Twelve and Thirteen.

*Northwest area **Municipalities** include:*

- Cities of Doral, Hialeah, Hialeah Gardens, Sweetwater, Miami Lakes, and Town of Medley.

*Northwest area **Major Neighborhoods** include:*

- The Lake District and
- Airport West commercial and industrial area.

- **Beach – Central Business District (CBD)** –

The Beach / CBD Transportation Planning Area includes the barrier islands along Biscayne Bay, parts of northeast Miami-Dade County, and the Miami CBD.

Commission Districts included in the Beach/CBD Area:

- Commission Districts Four and Five.

Municipalities included in the Beach/CBD Area:

- Cities of Miami Beach, North Bay Village, Aventura, and the Town of Golden Beach, Surfside, Bal Harbour, Indian Creek Village, and Bay Harbor Islands.

Sections of Municipalities included in the Beach/CBD Area:

- Cities of Miami, North Miami, North Miami Beach, and the Villages of Biscayne Park, Miami Shores.

Major Neighborhoods included in the Beach/CBD Area:

- Little Havana and
- The Roads areas of the City of Miami.

- ***Central*** - The Central Transportation Planning Area includes the area east of SW 76th Avenue, south of SW 30th Street, generally west of NW 37th Avenue, and north of SW 136th Street.

Commission Districts included in the Central Area:

- Commission Districts Six and Seven.

Municipalities included in the Central Area:

- Cities of South Miami, Miami Springs, and the Villages of Key Biscayne, Pinecrest, Virginia Gardens, and the Town of Medley.

Sections of Municipalities included in the Central Area:

- Cities of Miami, Hialeah, and Coral Gables.

- ***West*** - The West Transportation Planning Area includes the west central section of Miami-Dade County north of Kendall Drive / SW 88th Street, south of Tamiami Trail / SW 8th Street, east of Krome Avenue, and west of SW 76th Avenue.

Commission Districts included in the West Area:

- Commission Districts Ten and Eleven.

Municipalities included in the West Area:

- Cities of Coral Gables, South Miami, and the Village of West Miami.

Major Neighborhoods included in the West Area:

- Westwood Lakes,
- Kendall Lakes,
- Sweetwater,
- Fontainebleau, and
- Country Walk.

- **South** - The South Transportation Planning Area in Miami-Dade County includes the county south of Kendall Drive / SW 88th Street south to the Monroe / Miami-Dade county line.

Commission Districts included in the South Area:

- Commission Districts Eight and Nine.

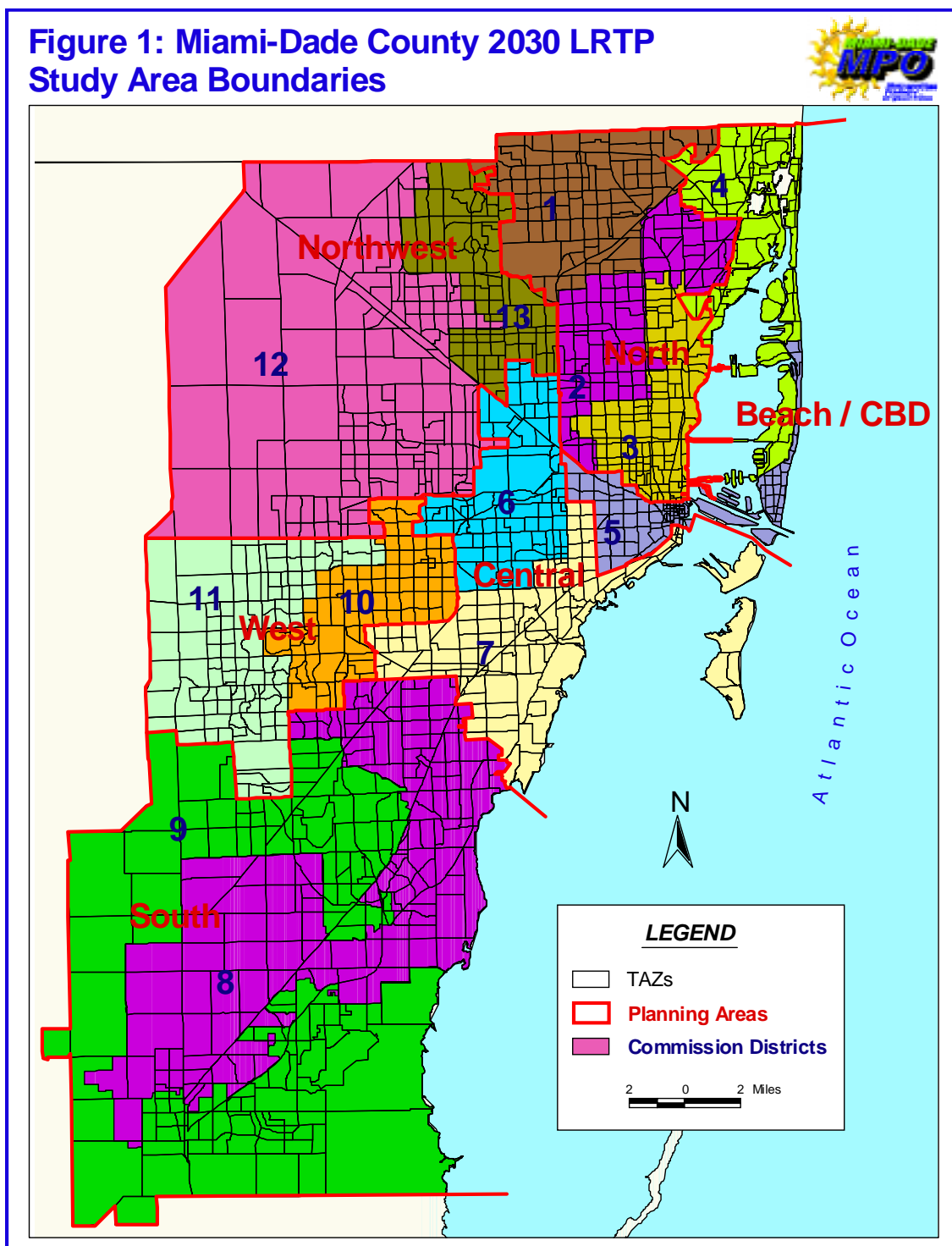
Municipalities included in the South Area:

- Cities of Homestead, Florida City, and the Villages of Palmetto Bay, and Pinecrest.

Major Neighborhoods included in the South Area:

- Rockdale,
- Perrine,
- Cutler,
- Peters,
- Bel Aire,
- Cutler Ridge,
- Franjo,
- Goulds,
- Naranja,
- Princeton, and
- South Allapattah.

**Figure 1: Miami-Dade County 2030 LRTP
Study Area Boundaries**



3.0 SOCIOECONOMIC DATA – YEAR 2000, 2015 AND 2030

The year 2000, 2015 and 2030 socioeconomic data sets include four zonal data sets: zonal data 1, production variables; zonal data 2, attraction variables; zonal data 3, special generators; and zonal data 4, external trips. The 2000 base year zonal data 1 and 2 data sets were developed by the Miami-Dade County Planning Department and reviewed by the LRTP Steering Committee and consultant team. Review included mathematical logic tests, reasonableness comparisons to other sources of data (such as the *Florida Statistical Abstract* and national statistics) and geographical analysis. Zonal data sets 3 and 4 were updated from the previous Plan model.

3.1 Zonal Data 1 - Production Variables

Production variables are the estimates of the number of trips originating from the population in the study area. These trips include trips to work, shopping and recreation. The production variables used in the model for the 2030 Plan are in lifestyle format. Whereas the standard model uses total dwelling units (occupied and unoccupied) without regard to the presence of workers or children in the household, the Lifestyle model differentiates between households with and without children and takes account of the number of workers in the households.

The Lifestyle ZDATA1A set includes the following variables:

- Number of households without children
- Number of households with children
- Number of vehicles in households without children
- Number of vehicles in households with children
- Number of workers in households without children
- Number of workers in households with children
- Number of persons in households without children
- Number of persons in households with children

Table 1 shows the 2000, 2015 and 2030 ZDATA1A variables and the percent increase between 2000 and 2030. The population and number of households in Miami-Dade County are expected to grow between 2000 and 2030. **Figure 2** shows the change in population by TAZ between the years 2000 and 2030. The number of households, workers, persons, and vehicles in households with children is each expected to grow by 49 percent or more. **Figure 3** shows the change, by TAZ, of the number of households between 2000 and 2030.

Table 1: Miami-Dade County 2030 Plan ZDATA1A

Variable	2000		2015		2030		Percent Increase between 2000 and 2030	
	without	with	without	with	without	with	without	with
Number of households	510,600	263,700	603,200	336,600	692,800	392,100	36%	49%
Number of vehicles in households	825,300	654,200	1,020,500	864,500	1,173,600	1,008,900	42%	54%
Number of workers in households	638,700	459,800	773,500	593,100	889,400	692,900	39%	51%
Number of persons in households	1,113,200	1,091,500	1,320,900	1,400,700	1,516,400	1,632,900	36%	50%

**Figure 2: Miami-Dade County
Change in Population between 2000 and 2030**

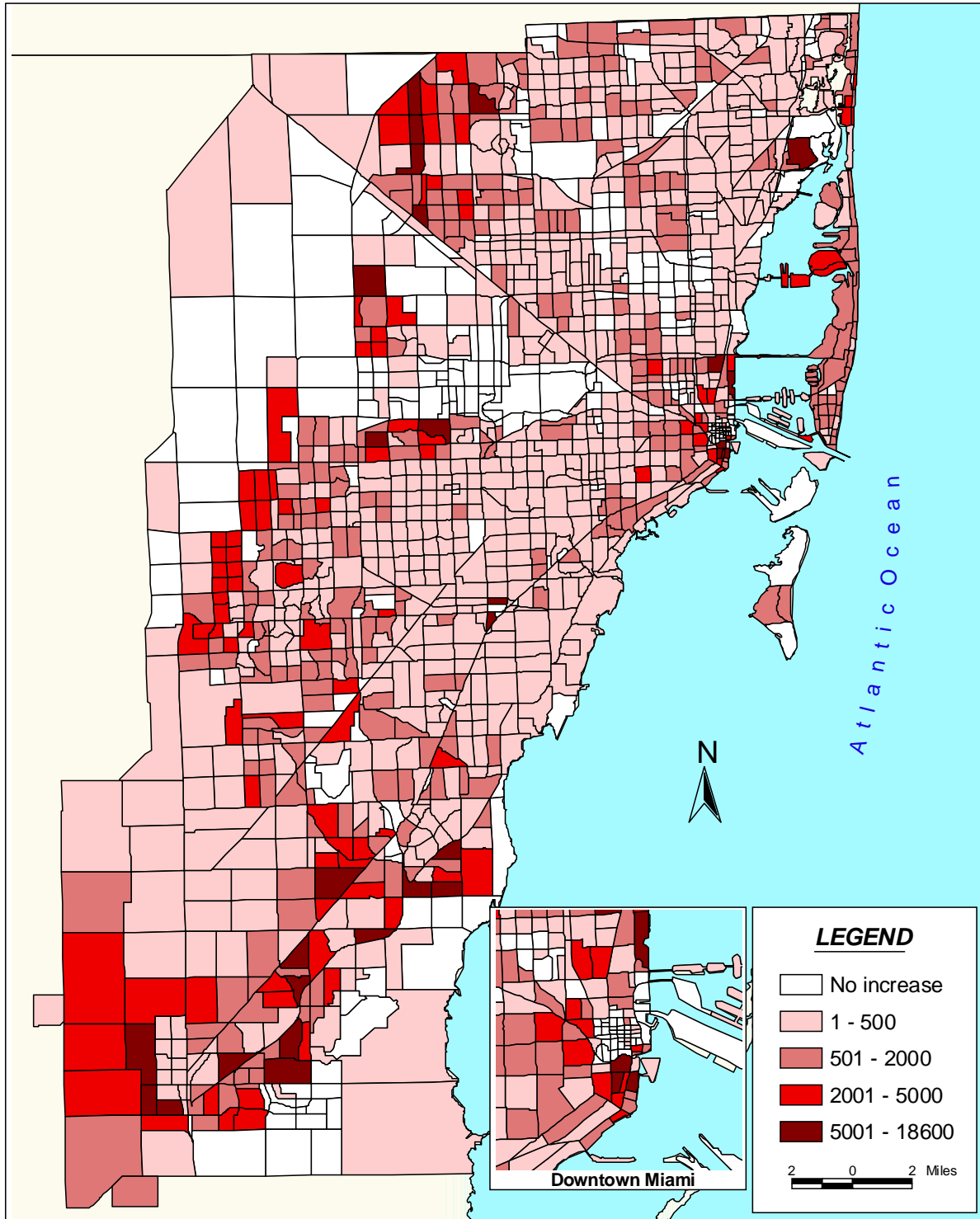
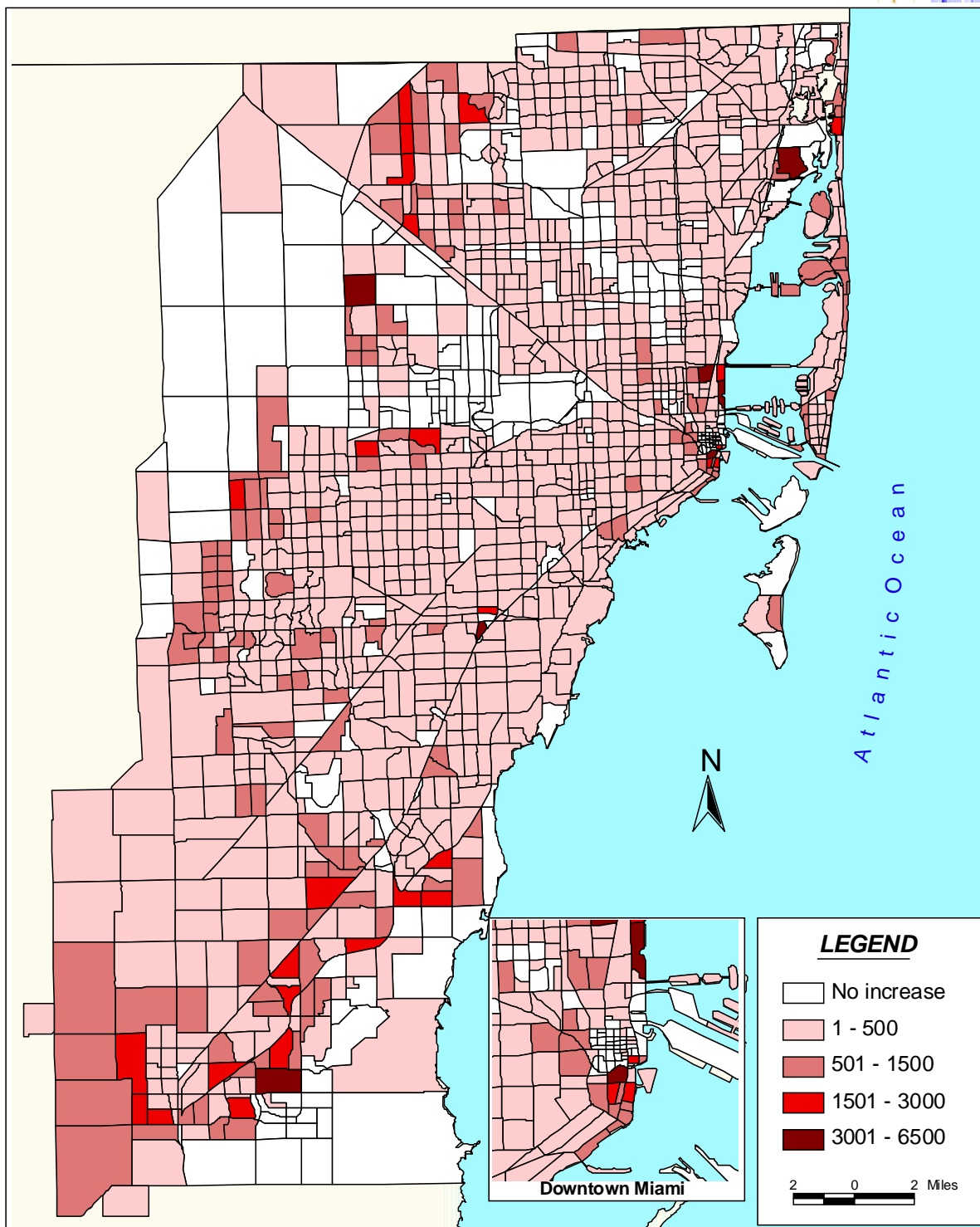


Figure 3: Miami-Dade County Change in Number of Households between 2000 and 2030



3.2 Zonal Data 2 – Attraction Variables

Attraction variables are the trips that are attracted to locations. The attraction variables data set, ZDATA2, includes the following variables:

- Industrial employment
- Commercial employment
- Service employment
- Total employment
- School enrollment
- Short-term parking cost
- Long-term parking cost

Table 2 shows the 2000, 2015 and 2030 ZDATA2 variables by landmark year and the percent difference between the base and horizon years for each variable.

Table 2: Miami-Dade County 2030 Plan ZDATA2

Variable	2000	2015	2030	Percent Difference between 2030 and 2000
Industrial employment	122,900	125,400	120,800	-2%
Commercial employment	313,700	367,600	498,200	59%
Service employment	746,700	932,400	971,200	30%
Total employment	1,183,300	1,425,400	1,590,200	34%
School enrollment	547,300	667,000	746,000	36%

Industrial employment in the county is expected to decrease between 2000 and 2030. However, total employment is forecasted to grow by 34%. The school enrollment is also expected to grow by 36% between 2000 and 2030. Total employment change between the years 2000 and 2030, by TAZ, is shown in **Figure 4**. **Figure 5** shows the breakdown by TAZ of the School Enrollment change between the years 2000 and 2030.

3.3 Zonal Data 3 – Special Generators

The third set of data used in the model validation is the special generator file, ZDATA3. Special generators are major activity centers that have a significantly different rate of trip generation than the standard FSUTMS trip rates. The Miami-Dade County special generators were reviewed and the number of special generators were minimized due to the fact that many of the generators did not act differently from model assumptions. More detail on the development of special generators is provided in *Technical Report*

Number 3: Model Review, Validation, and Model Update.

**Figure 4: Miami-Dade County
Change in Employment between 2000 and 2030**

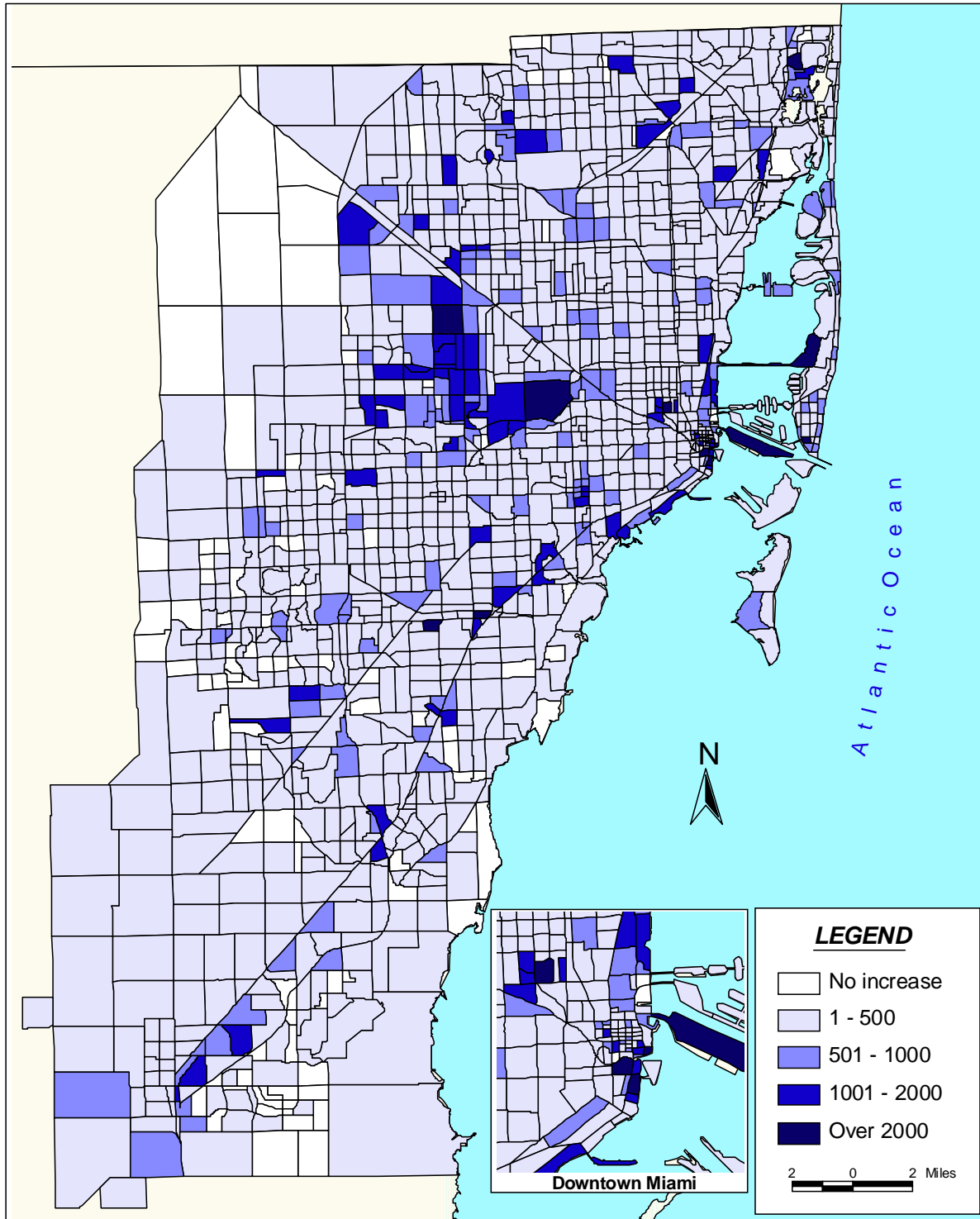
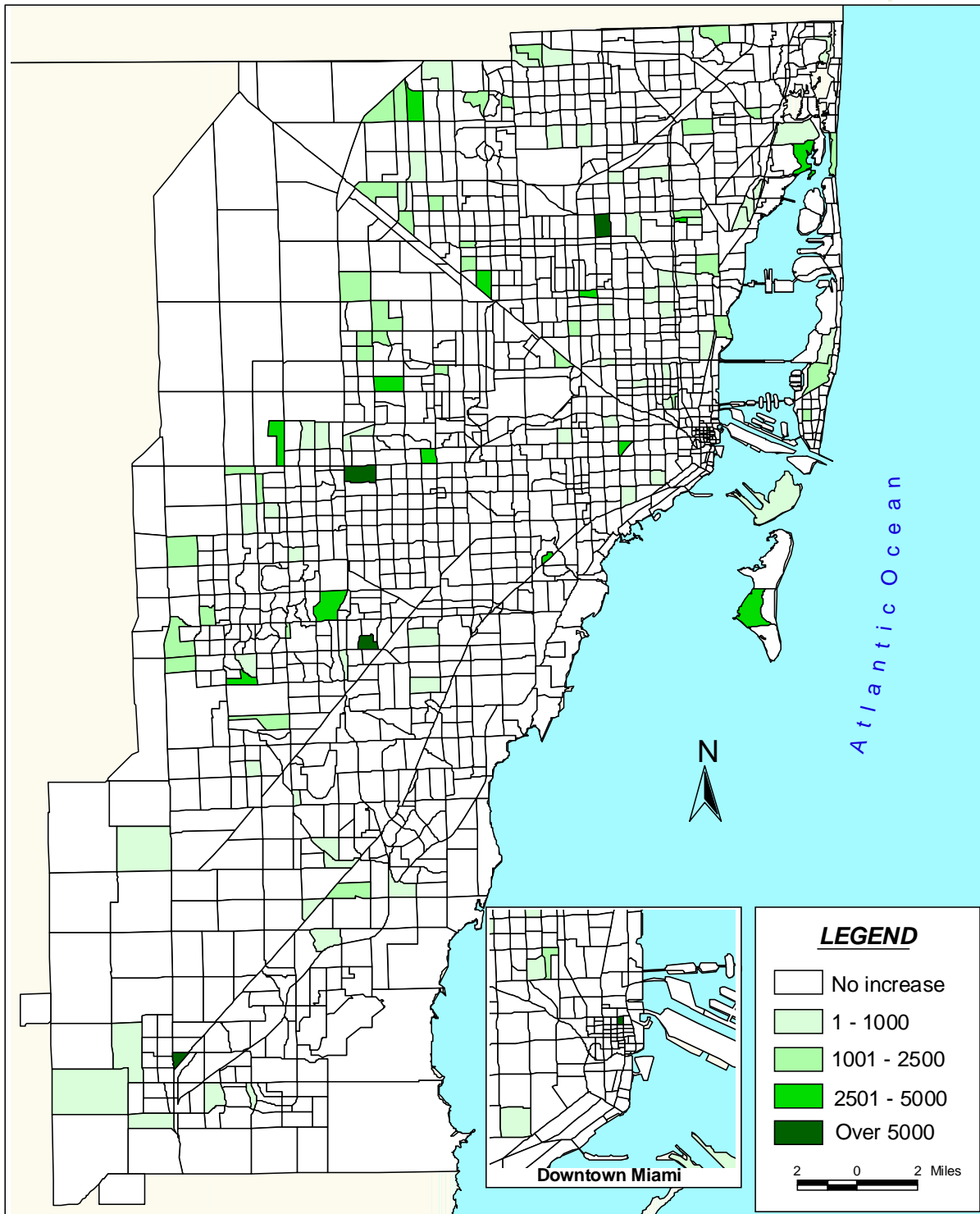


Figure 5: Miami-Dade County Change in School Enrollment between 2000 and 2030



3.4 Zonal Data 4 – Internal to External Trips (I-E Trips)

Zonal Data 4 is different between the Standard FSUTMS model and the Lifestyle model. The Standard model uses ZDATA4 to incorporate internal to external trips in the Trip Gen step, while the Lifestyle model uses the ZDATA4A for different reasons. More detail on these differences is provided in *Technical Report Number 3: Model Review, Validation, and Update*.